

What is claimed is:

1. An arrangement for simultaneous generation of a positive image and a negative image in digital projection, comprising:

a light source;

polarizing optics for delivering a linearly polarized light flow;

at least one polarizing beam splitter; and

an LCD panel for modulating the light flow;

said arrangement further comprising:

polarization optics and a reflecting LCD panel being arranged following said light source and in the beam path; and

two polarizing beam splitters having a Faraday rotator arranged therebetween being further arranged in front of the reflecting LCD panel.

2. The arrangement according to claim 1, wherein a rotation of the polarization plane of the incident light by 45° is carried out by the Faraday rotator with the light passing through only once.

3. The arrangement according to claim 1, wherein the first polarizing beam splitter which is arranged following the polarizing optics is provided for projecting a negative image.

4. The arrangement according to claim 1, wherein the second polarizing beam splitter arranged following the Faraday rotator and in front of the reflecting LCD panel is provided for projecting a positive image.

5. The arrangement according to claim 1, wherein when all of the pixels of the reflecting LCD panel are switched on and the polarization plane of the polarized light is

rotated by 90° in this way by the polarizing beam splitter, the light which is reflected out of the beam path is provided for projecting the positive image.

6. The arrangement according to claim 1, wherein, when all of the pixels of the reflecting LCD panel are switched off, after the polarized light passes through the polarizing beam splitter and passes a second time through the Faraday rotator and after the polarization plane is rotated by 90° in this way relative to that of the light traveling toward the polarizing beam splitter by the polarizing beam splitter, the light reflected out of the beam path is provided for projecting the negative image.